

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. Cancelled.
2. (Previously Presented) A non-tumorigenic cell composition derived from embryonic stem cells, the composition comprising about 100% isolated neural cells and neural precursor cells, the neural precursor cells having the ability to differentiate into neuronal cells or glial cells,

the composition being obtainable by:

- (a) culturing the embryonic stem cells to produce neural precursor cells;
- (b) culturing the neural precursor cells from (a) in a first growth factor-containing serum-free medium;
- (c) culturing the cells from (b) in a second growth factor-containing serum-free medium; and
- (d) culturing the cells from (c) in a third growth factor-containing serum-free medium,

wherein the cultured cells from (d) are non-tumorigenic and comprise neural cells and neural precursor cells, wherein the neural precursor cells have the ability to differentiate into neuronal cells or glial cells.

3. (Previously Presented) The cell composition according to claim 2, wherein the embryonic stem cells in step (a) are in the form of cell aggregates.
4. Cancelled.
5. Cancelled.

6. (Previously Presented) The cell composition according to claim 2, wherein the cells of steps (c) and (d) grow as a monolayer.
7. Cancelled.
8. (Previously Presented) The cell composition according to claim 2, comprising cells with neuronal, astroglial or oligodendroglial properties.
9. (Previously Presented) The cell composition according to claim 2, wherein the embryonic stem cells are obtained after nuclear transfer into oocytes.
10. (Previously Presented) The cell composition according to claim 2, wherein the embryonic stem cells are obtained from embryonic germ cells.
11. (Previously Presented) The cell composition according to claim 2, wherein the cells are mammalian cells.
12. (Previously Presented) The cell composition according to claim 11, wherein the cells are isolated from a mammal selected from the group consisting of mouse, rat, hamster, pig, cow, primate, and human.
13. Cancelled.
14. Cancelled.
15. (Previously Presented) A cell library comprising autologous and non-autologous cells according to claim 47.
16. – 45. Cancelled.
46. (Previously Presented) A pharmaceutical composition comprising the precursor cells of claim 47.
47. (Previously Presented) A non-tumorigenic cell composition derived from embryonic stem cells,

the composition comprising about 100% isolated neural cells and neural precursor cells, the neural precursor cells having the ability to differentiate into neuronal cells or glial cells, and wherein the cell composition is non-tumorigenic.

48. (Previously Presented) The cell composition of claim 2, wherein the embryonic stem cells in (a) are cultured in serum-free medium.

49. Cancelled.

50. (Previously Presented) The cell composition of claim 3, wherein the cell aggregates are embryoid bodies.

51. Cancelled.

52.-75. Not entered.

76. (Previously Presented) A non-tumorigenic cell composition derived from embryonic stem cells, the composition comprising about 100% isolated neural cells and neural precursor cells that have the ability to differentiate into neuronal cells or glial cells, the composition being obtainable by:

- (a) culturing the embryonic stem cells to produce neural precursor cells;
- (b) culturing the neural precursor cells from (a) in a first growth factor-containing serum-free medium; and
- (c) culturing the cells from (b) in a second growth factor-containing serum-free medium to produce neural spheres,

wherein the cells of the neural spheres are non-tumorigenic and comprise neural cells and neural precursor cells, wherein the neural precursor cells have the ability to differentiate into neuronal cells, astroglial cells, or oligodendroglial cells.

77. (Previously Presented) The cell composition according to claim 76, wherein the embryonic stem cells in (a) are in the form of cell aggregates.

78. (Previously Presented) The cell composition of claim 77, wherein the cell aggregates are embryoid bodies.
79. (Previously Presented) The cell composition of claim 76, wherein the embryonic stem cells in (a) are cultured in serum-free medium.
80. (Previously Presented) The cell composition according to claim 76, wherein the embryonic stem cells are obtained after nuclear transfer into oocytes.
81. (Previously Presented) The cell composition according to claim 76, wherein the embryonic stem cells are obtained from embryonic germ cells.
82. (Previously Presented) The cell composition according to claim 76, wherein the cells are mammalian cells.
83. (Previously Presented) The cell composition according to claim 82, wherein the cells are isolated from a mammal selected from the group consisting of mouse, rat, hamster, pig, cow, primate, and human.
84. Cancelled.
85. (Previously Presented) A cell library comprising cells according to claim 76, which are autologous and nonautologous cells.
86. (Previously Presented) A pharmaceutical composition comprising the precursor cells of claim 76.
87. (Previously Presented) A non-tumorigenic cell composition derived from embryonic stem cells, the composition comprising about 100% isolated neural cells and neural precursor cells that have the ability to differentiate into glial cells, the composition being obtainable by:
- (a) culturing the embryonic stem cells to produce neural precursor cells;

- (b) culturing the neural precursor cells from (a) in a first growth factor-containing serum-free medium;
- (c) culturing the cells from (b) in a second growth factor-containing serum-free medium to produce neural spheres; and
- (d) culturing the neural spheres from (c) in a third growth factor-containing serum-free medium to produce a monolayer of glial precursor cells,

wherein the cells of the monolayer are non-tumorigenic and comprise neural cells and neural precursor cells, wherein the neural precursor cells have the ability to differentiate into glial cells.

88. (Previously Presented) The cell composition according to claim 87, wherein the embryonic stem cells in step (a) are in the form of cell aggregates.

89. (Previously Presented) The cell composition of claim 88, wherein the cell aggregates are embryoid bodies.

90. (Previously Presented) The cell composition of claim 87, wherein the embryonic stem cells in (a) are cultured in serum-free medium.

91. (Previously Presented) The cell composition according to claim 87, wherein the embryonic stem cells are obtained after nuclear transfer into oocytes.

92. (Previously Presented) The cell composition according to claim 87, wherein the embryonic stem cells are obtained from embryonic germ cells.

93. (Previously Presented) The cell composition according to claim 87, wherein the cells are mammalian cells.

94. (Previously Presented) The cell composition according to claim 93, wherein the cells are isolated from a mammal selected from the group consisting of mouse, rat, hamster, pig, cow, primate, and human.
95. Cancelled.
96. (Previously Presented) A cell library comprising cells according to claim 87, which are autologous and nonautologous cells.
97. (Previously Presented) A pharmaceutical composition comprising the precursor cells of claim 87.
98. (Previously Presented) A cell library comprising cells according to claim 2, which are autologous and nonautologous cells.
99. (Previously Presented) A pharmaceutical composition comprising the precursor cells of claim 2.
100. (Previously Presented) The cell composition according to claim 2, wherein the second growth factor-containing serum-free medium comprises bFGF and EGF.
101. (Previously Presented) The cell composition according to claim 2, wherein the third growth factor-containing serum-free medium comprises bFGF and PDGF.
102. (Previously Presented) The cell composition according to claim 76, wherein the second growth factor-containing serum-free medium comprises bFGF and EGF.
103. (Previously Presented) The cell composition according to claim 87, wherein the second growth factor-containing serum-free medium comprises bFGF and EGF.
104. (Previously Presented) The cell composition according to claim 87, wherein the third growth factor-containing serum-free medium comprises bFGF, EGF, or a combination thereof.
105. Not entered.